ELECTRONIC APPARATUS CAPABLE OF FLIPPING OVER ONE OF CASING BODIES RELATIVE TO THE OTHER

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is based upon and claims the benefit of priority from the prior Japanese Patent Application No. 2002-159986, filed May 31, 2002, the entire contents of which are incorporated herein by reference.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention relates to an electronic apparatus wherein a pair of casing bodies, which are foldable by means of a hinge section, can be fixed in such a state that the casing bodies are superposed on each other.

[0004] 2. Description of the Related Art

[0005] Electronic apparatuses have been used in various fields. There is known an electronic apparatus having an input unit such as a touch panel in order to enhance the operability according to purposes of use.

[0006] Jpn. Pat. Appln. KOKAI Publication No. 11-39058 discloses, as an example of the electronic apparatus, a pen-input type electronic apparatus. The electronic apparatus has a main body casing and a cover. The main body casing and the cover are coupled by a hinge. The main body casing includes circuit components such as a printed circuit board, etc. The cover has a display unit and a touch panel. In order to operate the touch panel, the cover is raised away from the main body casing by means of the hinge, and the cover in the raised state is turned over and folded back onto the main body casing such that the touch panel faces outward.

[0007] The main case body and the cover are provided with latches and latch holes for fixing them in two states. In one state, the cover is superposed on the main body casing such that a display screen of the cover faces inward. In the other state, the cover is superposed on the main body casing such that the display screen faces outward. The latches are built in the main body casing, and these are operated by each latch knob. The latch holes are formed on both sides of the cover so as to correspond to the latches.

[0008] According to the electronic apparatus of Jpn. Pat. Appln. KOKAI Publication No. 11-39058, however, it is presupposed that the input operations are performed through the touch panel. In addition, the latches project from the main body casing so as to fit into the latch holes formed in the cover. If this technique is applied to an electronic apparatus having a keyboard, such as a personal computer, the latches would project from the main casing body in the state in which the cover is raised away from the main body casing, and this would prevent easy operations of the keyboard.

[0009] Furthermore, this electronic apparatus is switched between an available state and an unavailable state by turning over the cover. In the use state, the main body casing and the cover are superposed on each other. Since the latch always projects, it cannot be provided on the cover.

BRIEF SUMMARY OF THE INVENTION

[0010] An electronic apparatus according to the present invention has a latch mechanism that does not deteriorate the operability of the electronic apparatus.

[0011] An electronic apparatus of a first embodiment according to the present invention has a first casing body, a second casing body, an engaging member, and a stopper portion. The second casing body is coupled to the first casing body by means of a hinge mechanism such that the second casing body is rotatable between a first state in which one surface of the second casing body is superposed on the first casing body and a second state in which the other surface of the second casing body is superposed on the first casing body. The engaging member projects from the one surface of the second casing body in the first state, and projects from the other surface of the second casing body in the second state. The stopper portion engages the engaging member in each of the first and second states.

[0012] Additional objects and advantages of the invention will be set forth in the description which follows, and in part will be obvious from the description, or may be learned by practice of the invention. The objects and advantages of the invention may be realized and obtained by means of the instrumentalities and combinations particularly pointed out hereinafter.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

[0013] The accompanying drawings, which are incorporated in and constitute a part of the specification, illustrate presently preferred embodiments of the invention, and together with the general description given above and the detailed description of the preferred embodiments given below, serve to explain the principles of the invention.

[0014] FIG. 1 is a perspective view showing a personal computer according to a first embodiment of the present invention;

[0015] FIG. 2 is a perspective view showing a first state in which a display panel and a main body of the personal computer shown in FIG. 1 are superposed on each other;

[0016] FIG. 3 is a perspective view showing a state in which the display panel of the personal computer of FIG. 1 is flipped over toward a bottom surface side of the display panel;

[0017] FIG. 4 is a perspective view showing a latch mechanism as viewed in the direction of arrow A in FIG. 2;

[0018] FIG. 5 is a perspective view showing a state in which an engaging member of the latch mechanism shown in FIG. 4 is rotated;

[0019] FIG. 6 is a perspective view showing a state in which the engaging member of the latch mechanism shown in FIG. 4 is further rotated and a second claw is exposed from the display panel;

[0020] FIG. 7 is a perspective view showing a state in which the latch mechanism of FIG. 4 is engaged in a second state;

[0021] FIG. 8 is a schematic cross-sectional view of the latch mechanism in the first state, as viewed in the direction of arrow B in FIG. 2;